



Socio-Economic and Agrarian history of the Jatun Sumaco communities in the Ecuadorian Amazon

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ABSTRACT: The purpose of this research was to analyze the socioeconomic and agrarian activity of the communities that make up the Jatun Sumaco parish, in the Napo province of the Ecuadorian Amazon, with the aim of contextualizing changes and transformations taking place in the rural sector to strengthen agriculture and livestock production models. On the basis of primary sources, documentary analysis methods related to agriculture, livestock and economic development programs in Ecuador were employed, as well as interviews with local people. The analysis of the theoretical referents showed that the Ecuadorian Amazon has undergone a complex process of agriculture-related changes as a result of the uncontrolled use of natural resources. The socioeconomic and agrarian history of the communities reflected its cultural character with a predominance of Kichwa indigenous ethnic groups; loss of identity values was observed in the young social fabric, as well as low income and full dependence on productive farm activities, Solanun quotence being the most represented crop. The role and the importance of local governments, provincial councils, municipalities, parish councils and non-governmental organizations are recognized in rural communities and evidenced through the cacao, naranjilla and forest dialogue platforms.

Keywords: Agrarian, social history, economy, communities.

Subject Classification Codes: JEL: Q – Agricultural and Natural Resource Economics; Environmental and Ecological Economics; JEL: N – Economic History; JEL: R – Urban, Rural, and Regional Economics; JEL: B – History of Economic Thought, Methodology, and Heterodox Approaches

INTRODUCTION

Agricultural production models play an essential role in economic development and in eradicating poverty and food insecurity. Measures to that end include: raising agricultural productivity and encouraging other rural development sources, enhancing human capacities in rural areas through health, education and sanitation services, as well as access to productive resources, with stress on gender equality, and preserving the capacity of the natural environment to sustain the present population and future generations (Dorward and Morrison, 2000).

Indigenous peoples and nationalities play a key role as administrators of their territories and resources. Traditional knowledge and sustainable practices have survived and thrived in all corners of the world. However, there are side effects which, when left unchecked, threaten the environmental public goods that indigenous peoples so vitally depend upon for their cultural, spiritual and physical sustenance. (Mejeant, 2001; Global Environment Facility, 2015).

The Napo province is considered an ecological paradigm in Ecuador, characterized by indigenous communities living in territories of enormous biological importance. Its economy is fully dependent on natural resources, as is the case of the Jatun Sumaco parish, where its inhabitants have traditionally been able to satisfy their sustenance needs through agriculture, extensive agroforestry and collection of forest products, which deserves concentrated efforts to ensure production models based on sustainable practices. This research seeks therefore to analyze the socioeconomic and agrarian history of the Jatun Sumaco

communities, Napo Province of the Ecuadorian Amazon, with the aim of contextualizing changes and transformations taking place in the rural sector.

SCOPE AND METHODOLOGY

This research was conducted in the communities of the Jatun Sumaco parish, Napo province of the Ecuadorian Amazon, located in the Sumaco Biosphere Reserve (Figure 1) in the foothills of the Sumaco Volcano protective forest, within the forest heritage of the Sumaco-Napo-Galeras National Park in the Archidona canton, comprising seven communities (Challuayacu, Pacto Sumaco, Pucuno chico, Wamani, Wawa Sumaco, 10 de Agosto and Volcán Sumaco), predominantly belonging to the Kichwa ethnic group.

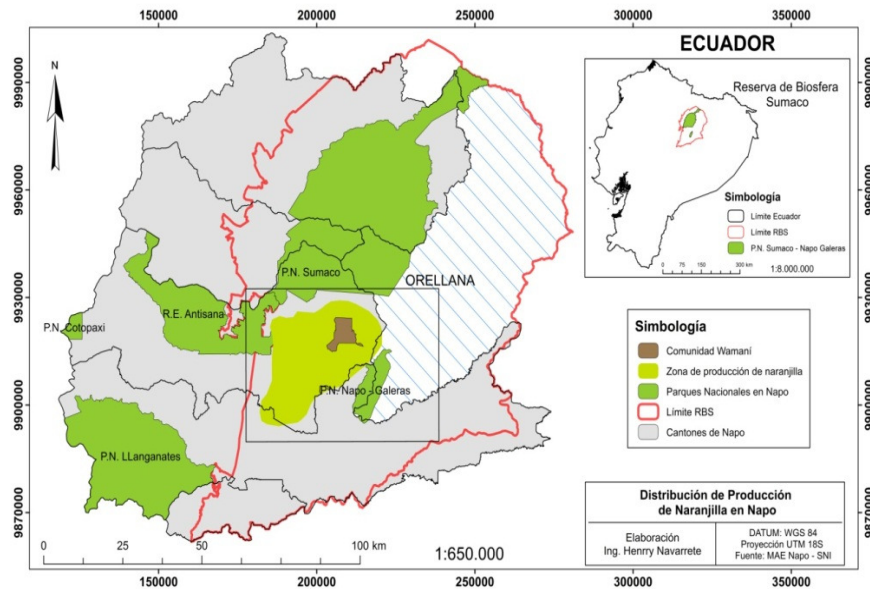


Figure 1. Geographic location of the Jatun Sumaco community.

Theoretical referents regarding the characteristics of the Ecuadorian Amazon were taken into account, as well as its main structural socio-economic and agrarian transformations, history of the communities living in the Jatun Sumaco parish, actors involved in the development of the community and perception of the population about the socio-economic and agrarian structure.

On the basis of primary sources, documentary analysis methods related to agriculture, livestock and economic development programs implemented in Ecuador were employed, as well as interviews with local people.

STRUCTURAL TRANSFORMATIONS IN ECUADOR AND IN THE AMAZON REGION

Ecuador has undergone a structural transformation of the State that has shown the recovery of a process of national planning and prolonged democratic stability. The country endured social and occupational deterioration during a crisis that resulted in the loss of about 7 % of Gross Domestic Product (GDP) in 2000. However, in the mid-2000s the country regains a certain rate of growth and the crisis is progressively reversed by implementing policies designed to recover oil revenues, strengthen public investment through quality of expenditure and efficiently manage the tax policy. With regard to rural development, the National Plan for Good Living (2013-2017) seeks in its objective No. 10: "To promote transformation of the productive matrix", whose policy and strategic guideline 10.4 is: "To promote production and productivity sustainably, encouraging inclusion and redistributing production factors and resources in the agricultural, aquacultural and fishing sectors. As for the Ecuadorian agrarian structure, the division between Commercial Agriculture and Peasant Family Farming remains with serious distortions.

Commercial agriculture typically focuses on the cultivation of one single crop, occupies up to 80% of the available land in the 15% of Farming Production Units (UPA for its acronym in Spanish), uses 63% of irrigation water and the indiscriminate use of agrochemicals and energy for agro-product export. Family farming, which is mainly used to satisfy basic needs, occupies only 20% of the land in 84.5% of UPAs, with 37% of irrigation water. More than 64% of agricultural production comes from family farming which also contributes to the majority of the food consumed in Ecuador (60%). Family farming also contributes to the supply of export products: 80% of cacao production units and 93% of coffee production units (National Priority Framework for FAO Technical Assistance in Ecuador 2013-2017).

Ecuador is currently undergoing urban expansion, promoting changes in land use for the construction of housing, roads and industries that consume substantial amounts of natural resources, altering their quality. Ecuador is a country highly-vulnerable to



climate change. Its ability to adapt to the effects of climate change is limited due to poverty and its geographical position, among other factors. Increased intensity and frequency of local and regional phenomena, such as El Niño, repeatedly undermine the socio-economic situation in the country. These events have brought a certain degree of awareness in the Ecuadorian society of the need for mediate and immediate action to confront direct and indirect impacts of global warming. Due to geomorphological conditions and the effect of human activity, the country is prone to landslides, mudflows and erosion when heavy rainfall events occur. In recent decades, Ecuador has experienced a variety of natural phenomena of significant magnitude adversely affecting the most vulnerable population groups: the poor in rural areas.

In Ecuador, 36,3 % of people live below the poverty line, a percentage that rises to 61,5 in rural areas. The pattern of natural disasters in Ecuador is characterized by a steady increase in the number of events and also their impact, principally those associated with floods, droughts and extreme temperatures. In the past twenty years a total of 29 large-scale natural disasters affected the country, 59% of which were of climatic origin (FAO, 2008).

In Ecuador, the agricultural reform process begun in 1964 did not improve distribution of the land, but rather maintained the concentrated structure whereby the best land was held in just a few hands. The law on Agricultural Development was promulgated in 1994 with the purpose of driving agricultural modernization and consolidating a new concentrated structure supported by the private sector. In this sense productive economic variables became important, whilst social, cultural and ecological ones were sidelined. A market for land was promoted as a strategy for the improvement of efficiency and the levels of production and productivity in the countryside, limiting small peasants' access to the land. However, at local level, local governments, provincial councils, municipalities, parish administrations and non-governmental organizations are playing a major role regarding land management and administration (access to and legalization of land tenure) in favor of the population affected by natural disasters; interesting experiences at local level which, although targeted and small-scaled, can be used for the design of mechanisms and policies on land access and land tenure regarding natural disasters (FAO, 2008).

The Ecuadorian Amazon region belongs to the floristic province of northwestern Amazonia and a large part of it, known as the Napo region, is home to one of the major biodiversity hotspots of the tropical rainforest (Gentry, 1988; Valencia et al., 1994). This diversity includes more than 4.800 vascular plant species equivalent to 32 % of total species richness described for Ecuador (Jørgensen y León, 1999). However, the region has not been exempt from changes and transformations that threaten the stability of agrarian systems.

The Amazonian subregion, with its huge extent and complexity, is without doubt one of the most important biological reserves in the world today. The region covers some 7.2 million km², of which 6.3 million km² are forest area. The Amazon forest accounts for 56 percent of total broad-leaved forests in the world and comprises several of the world's most complex ecosystems with hundreds of thousands of flora, fauna and insect species, many of which have not yet been identified. Knowledge and long-term management of this natural heritage is a basic requirement for sustainable development. In many parts of the subregion, however, increased demographic pressure, unplanned use of soil and vegetation, continuous migration both into and from the region, and the concentration of land ownership and use rights, have set off a progressive deterioration process. Poorly planned settlements, and efforts to produce short-cycle commercial crops or raise cattle (often driven by financial incentives), have contributed to the accelerated degradation of some areas of the region, especially Ceja de Selva in Peru; Rondonia and Acre in Brazil; northeastern Ecuador, and Ariari, Caquet and Putumayo in Colombia (FAO 1990).

Until not long ago, there was the generalized belief that the Amazon offered a gigantic opportunity for agricultural development through the transformation of forest areas into pastures and plantations based on techniques that had proved successful in other regions. However, the fertility of the Amazonian soils appears to be more myth than reality. Although it is true that the considerable biological variety includes areas in which the terrain is truly suitable for sustainable agriculture and ranching, these areas are very much the exception rather than the rule. For the most part, the soils of the Amazon are of poor quality and easily degraded. According to research conducted in several parts of the Amazon basin, approximately 94 percent of the area is not suitable for conventional agriculture, owing to low fertility of the soil, high aluminum toxicity levels, or shallow soil depths. Parallel to the efforts of the Amazon countries themselves, international interest in the region has increased significantly, and the situation is described in increasingly dramatic terms. The forests of the Amazon are not necessarily condemned to disappear or to be reduced to discontinuous patches, in the same way that forests have over time in other parts of the world (FAO, 1990). But it is clear that the problems of occupation, deforestation and environmental degradation in the subregion are serious and that they require an international partnership effort proportionate to the perception of their global consequences.

While the Upper Amazon was the region of colonial occupation and of significance in the pre-colonial period, in the nineteenth century it was virtually abandoned by the national State. Between 1830 and 1840, the Oriente was made up of two cantons: Macas and Quijos. These did not constitute a region at that time, but were a hinterland of the Sierra.

Ethnicity in this area showed a dualism between whites and Indians, with no mediation of mestizaje. Their participation in the construction of the nation state was very marginal. The Amazon was the region where most changes occurred during the twentieth century. While efforts to articulate the national territory started with the century, the process was accelerated beginning in the forties by the different incursions of the Church into the region. Transformations of the Amazonian space are associated with three significant events: the war with Peru in 1941, the Agrarian Reform and the start of oil extraction in 1972 (SENPLADES, 2014).



The war with Peru turned the region into a frontier of highest strategic importance. A process of creation of live frontiers was encouraged, promoting settlement in the Amazon. The region also started to gain importance in the social imaginary and, after centuries of neglect, began to be regarded, for the first time, as a significant part of the national territory. In the sixties and seventies, the Amazon underwent an intense colonization process, resulting from the characteristics that the Agrarian Reform adopted in Ecuador; however, most profound changes went hand in hand with oil extraction processes in the seventies. This generated, among other effects, that the highest rate of population growth in the country was concentrated in the Amazon, as a result of colonization and internal migration (Larrea, 2011).

Oil extraction brought along the articulation of northern Lower Amazonia to the national territory, through the displacement of populations, mainly from the Sierra, who were in search of employment, and the construction of an important road network that allowed access to previously inaccessible regions. Uncontrolled settlement of the territory caused deforestation of large tropical forest areas to make space for subsistence farming and an extensive livestock system. The environmental and human costs of the oil extraction process were extremely high. Rapid population growth, social disarticulation, deforestation and pollution caused by wastes generated by the oil industry have been the distinctive features in the oil-extraction areas. Moreover, the Colombian conflict has produced an extreme vulnerability in the Northern, particularly the Amazonian border, evidenced in serious problems of violence and high levels of social conflict (SENPLADES, 2014).

SOCIOECONOMIC HISTORY AND AGRARIAN STRUCTURE OF THE JATUN SUMACO COMMUNITIES

The Napo province offers important tourist attractions for those who enjoy the tropical forest, river boat-rides or merely observing the diversity of flora and fauna.

Visitors to this province are mostly characterized by their wish to interact with the local population belonging to the Kichwa ethnic group, as well as to learn about their cultures and traditions. Handicrafts are made by its inhabitants with natural products from the region, such as shigras (handbags), pottery, bows and arrows. These peoples have preserved their traditions over the centuries.

The poverty rate in the Napo province is 78,62 %, corresponding to an average level, being ranked 21st under a sequential order among 24 nationwide, with 10 points higher than the national average, while the poverty rate in the Archidona canton is 88,52 %, 10 points higher than the provincial average (SENPLADES, 2014).

The Jatun Sumaco parish has an important water resource consisting of four major basins that flow almost entirely in North-West, South-East direction. The potential is reflected in the Wamani, Hataracu, Pingullo and Pucuno rivers, the last three being the main water resources in the area. The Pingullo River flows into the Pucuno River, which in the lowland rainforest (Selva Baja) flows into the Huataracu River to become an affluent of the Suno, and finally a tributary of the Napo (SENPLADES, 2014). The parish is located in a large, generally shallow valley, with slopes that do not exceed 15 degrees, due to which surface currents are low and, in some areas, rainwater does not flow easily forming small lagoons. Anthropological and cultural elements, as well as natural attractions found in the communities contribute to understand the rich heritage of the parish. The members of this community are direct descendants of the Kichwas from Cotundo. In the 70s they used to work in agricultural activities in their parents' farms. Poverty data is the most noticeable indicator with a very high percentage of 96,75 %, 18 points higher than the poverty level in the Napo province. Human settlements are heterogeneous and dispersed; the most consolidated communities are 10 de Agosto and Wamani settled along the road axis Hollin Loreto Coca (SENPLADES, 2014).

Sociocultural richness in the region has great potential for sustainable economic and human development, which has not been fully "exploited". Cultural values, such as language, traditions and mainly traditional practices for natural resources management, scientifically and practically adapted to their ecological environment, have helped to conserve natural resources (water, soil, biodiversity), as well as to foster the economy in the region. Ancestral knowledge developed by indigenous communities on the use of forest resources, mainly related to medicine and food, contributes to the development of pharmacology and active ingredients of genetic resources, having also a great potential to encourage the economy in the region.

Social and cultural aspects that characterize the surveyed area are reflected in the Territorial Development and Land Use Plan (Plan de Desarrollo y Ordenamiento Territorial). The Kichwa people maintained and expanded their culture throughout the province, preserving many of their customs and traditions, although in some communities this tendency is low (SENPLADES, 2014).

One of the Kichwa cultural manifestations is their traditional clothing worn nowadays only in certain cultural activities, such as family and community celebrations. Clothing has been influenced by the Western culture. Nowadays this practice is fading out as adults show little interest in cultural transmission to new generations, mainly because young people refuse to wear traditional clothing, which denotes a loss of cultural identity values. This is reinforced by the official requirement to wear school uniforms and by new cultural activities that distort the importance of preserving their traditional clothing. Ancestral cuisine is directly related to the Kichwa majority population, mainly represented in social events. The most representative foods are mazamorra de guanta (guanta and shredded plantain based soup), chontacuro (chonta palm worms) and chicha de chonta (fermented chonta palm drink) consumed nowadays by 65% of families. Western influence, however, is changing dietary habits evidenced in increased consumption of soft drinks and packaged juices, noodles, biscuits, cheetos snacks, potato chips and other junk food with low



nutritional value; chicha is also being replaced by liquor creating a new family culture of alcohol consumption that affects even children. This is favored by the easy access to alcohol and an excessive, well targeted diffusion and advertising process through most communication media.

González (2013) proved the importance of knowledge transfer within the communities and of socialization processes regarding these customs for their preservation. Thus, the custom is also part of the immaterial and ideological fabric guiding people's habits and, with it, the institutions' practices. The author points out that norms and customs provide local organizations with a major regulatory dimension that is one of the pillars of community life.

With regard to economic activities, informal interviews revealed that the communities in the Jatun Sumaco parish fully depend on the production generated on farms, selling timber, agricultural products (predominantly naranjilla) or cattle. Due to its geographical location, large extensions suitable for different, particularly short-cycle crops and for livestock are available. According to Vallejo et al., (2013), land use is oriented to agriculture, grazing, (legal and illegal) logging and volcanic eruptions (Sumaco and Cotopaxi volcanoes).

Indigenous peoples have traditionally been able to satisfy their sustenance needs through agriculture, extensive agroforestry and collection of forest products. These activities obviously involve some level of disturbance when management practices are not combined with their traditional knowledge. In many cases, this condition is not met and appropriate management practices are required.

According to Fletes et al., (2006) such practices involve a land use rotation that begins with a period of short-term, extensive agricultural use in small areas, followed by a period of short-term, extensive agricultural use in small areas, a period of agroforestry use and finally a period of regeneration through succession. The whole land use rotation period is quite long and may often last 30 years or more. This author also notes that a significant forest area in the Sumaco sector has been historically subject to human use. This activity had a deep impact on the rainforest, mainly due to the successive management of farms and secondary forests implementing a low-intensity pattern of use. The traditional land use supplied almost all the needs of indigenous people in the Sumaco region during previous centuries. They grew pita to obtain fiber that was sold in Archidona and in Quito. They also sold medicinal plants. Cotton crops are also reported in the colonial era. In the past 10 - 30 years, land use has changed because of the development that took place in the region. Due to the possibilities of market access, indigenous people also grow agricultural products for sale in addition to their subsistence crops. Colonization also puts pressure on natives to prove their effective possession of land, so as to obtain land titles. Due to this reason, many of them in Archidona started to grow grass and raise cattle. Population growth, mainly in Archidona, Tena, Loreto and Coca, is reducing the ease of access to land by indigenous families.

PEOPLE'S PERCEPTION IN THE JATUN SUMACO COMMUNITIES

The Jatun Sumaco parish presents a very heterogeneous level of development in its social fabric. Some communities, such as Pucuno Chico and Challuayacu have incipient organizational processes, with predominance of cultures and traditions that differ from the patterns traditionally characterizing the ethnic group and that are far behind in their organizational contribution.

Communities are generally legally organized as Kichwa at the Council for Development of Nationalities and Peoples of Ecuador (Consejo de Desarrollo de las Nacionalidades y Pueblos del Ecuador - CODENPE) and other institutions, such as the Ministry of Environment (Ministerio del Ambiente de Ecuador - MAE), Ministry of Agriculture, Livestock, Aquaculture and Fisheries (Ministerio de Agricultura, Ganadería, Acuicultura y Pesca - MAGAP) and the Ministry of Economic and Social Inclusion (Ministerio de Inclusión Económica y Social - MIES) and are represented by a directive board, in which the main authorities are: president, vice president, secretary and board members. They are affiliated to the second-level organization called Council of Organizations of the Kichwa Nationality of Napo and Orellana (Consejo de Organizaciones de la Nacionalidad Kichwa de Napo y Orellana - CONAKINO) based in Tena, Federation of Organizations of the Kichwa Nationality of Napo (Organizaciones de la Nacionalidad Kichwa de Napo - FONAKIN) which is part of the Confederation of Indigenous Nationalities of Ecuador (Confederación de Nacionalidades Indígenas de Ecuador - CONAIE). Others belong to the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (Confederación de Nacionalidades Indígenas de la Amazonía Ecuatoriana - CONFENIAE), Coordination of the Indigenous Organizations of the Amazon Basin (Coordinación de las Organizaciones Indígenas de la Cuenca Amazónica - COICA) and National Council of Rural Parish Governments of Ecuador (Consejo Nacional de Gobiernos Parroquiales de Ecuador - CONAGOPARE).

The Jatun Sumaco parish government is included in other productive organization platforms encouraged by the Napo provincial government, such as the cacao, naranjilla and forest platforms, whereby topics related to agricultural systems are addressed in order to enhance production models supported by good practice approaches and implementation of ancestral knowledge.

In these platforms, a favorable environment for the rescue of customs and traditions of the communities, especially those more recently introduced, is perceived together with the willingness of people to achieve this goal.



CONCLUSIONS

The Ecuadorian Amazon has undergone a complex process of agriculture-related changes and transformations as a result of the uncontrolled use of natural resources, which threatens the stability of the agrarian systems, evidenced in unsustainable agricultural models, extensive agroforestry and collection of timber and non-timber products.

The socioeconomic and agrarian history of the communities reflected their cultural character with a predominance of Kichwa indigenous ethnic groups. A loss of identity values was observed in the young social fabric, as well as low income and full dependence on productive farm activities, predominantly Solanum quinine cultivation. The role and the importance of local governments, provincial councils, municipalities, parish councils and non-governmental organizations are recognized in rural communities and evidenced through the cacao, naranjilla and forest dialogue platforms, where changes in the communities' socioeconomic structure are perceived.

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CONFLICTS OF INTEREST

"The authors declare no conflict of interest".